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# Statistics for laboratory scientists

## Homework problems for lecture 17

1. I plan to measure something on **10** mice from one strain and **15** mice from a second strain. I am willing to assume that the measurements in the two strains are normally distributed with a common population SD.
    - a. What will be my power to detect a difference between the two strains (by a t-test) if the true difference between the strain means is **10** units, and the population SDs for the strains are **15** units? (**Use R.**)
    - b. How about if the true difference between the strain means is **20** (and the populations SDs are again 15)?
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Last modified: Thu Mar 2 12:53:41 EST  
2006